



VICKERY COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 21283

EPA Website Link:

Licensee: Vickery Coal Pty Ltd

Licensee Address: Vickery Coal Mine, Blue Vale Road, BOGGABRI NSW 2382

EPL Monitoring Points: See Figure 1 below

Sampling Period: April 2024

Obtained Date: 17/05/2024

Publication Date: 20/05/2024

Table 1: Surface Water – No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date of Max. Value Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comment/s
2	TSS	mg/L	Quarterly (Mar, Jun, Sep & Dec)	1	23/04/24	06/05/24	-	-	-	222	-
	Conductivity	µS/cm		1	23/04/24	06/05/24	-	-	-	104	
	Oil & Grease	mg/L		1	23/04/24	06/05/24	-	-	-	<5	
	pH	pH		1	23/04/24	06/05/24	-	-	-	7.24	
3	TSS	mg/L	Quarterly (Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	Low water level – no sample possible
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
9	TSS	mg/L	Quarterly (Mar, Jun, Sep & Dec)	1	23/04/24	06/05/24	-	-	-	341	-
	Conductivity	µS/cm		1	23/04/24	06/05/24	-	-	-	557	
	Oil & Grease	mg/L		1	23/04/24	06/05/24	-	-	-	<5	
	pH	pH		1	23/04/24	06/05/24	-	-	-	8.6	
10	TSS	mg/L	Upon discharge	1	23/04/24	06/05/24	-	-	-	379	-
	Conductivity	µS/cm		1	23/04/24	06/05/24	-	-	-	593	
	Oil & Grease	mg/L		1	23/04/24	06/05/24	-	-	-	<5	
	pH	pH		1	23/04/24	06/05/24	-	-	-	8.25	

Table 2: Surface Water - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date of Max. Value Obtained	Min Value	Max or Only Value	100%ile Limit	Exceed -ance (Yes/ No)	Comment/s
14	TSS	mg/L	Upon discharge	-	-	-	-	-	50	-	No discharge
	Conductivity	µS/cm							NA		
	Oil & Grease	mg/L		-	-	-	-	-	10	-	
	pH	pH		-	-	-	-	-	8.5	-	
20	TSS	mg/L	Upon discharge	-	-	-	-	-	50	-	No discharge
	Conductivity	µS/cm							NA		
	Oil & Grease	mg/L		-	-	-	-	-	10	-	
	pH	pH		-	-	-	-	-	8.5	-	
21	TSS	mg/L	Upon discharge	-	-	-	-	-	50	-	No discharge
	Conductivity	µS/cm		-	-	-	-	-	NA	-	
	Oil & Grease	mg/L		-	-	-	-	-	10	-	
	pH	pH		-	-	-	-	-	8.5	-	

Table 3: Groundwater – No Limits apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date of Max. Value Obtained	Min Value	Mean Value	Median Value	Max or Only Value
15	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	15/04/24	03/05/24	-	-	-	5610
	Lead	mg/L		1	15/04/24	03/05/24	-	-	-	<0.001
	pH	pH		1	15/04/24	03/05/24	-	-	-	7.57
	Standing Water Level	metres		1	15/04/24	03/05/24	-	-	-	6.52
16	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	17/04/24	03/05/24	-	-	-	2420
	Lead	mg/L		1	17/04/24	03/05/24	-	-	-	<0.001
	pH	pH		1	17/04/24	03/05/24	-	-	-	7.68
	Standing Water Level	metres		1	17/04/24	03/05/24	-	-	-	7.94
17	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	-	15/04/24	-	-	-	-	Logger Data available
	Lead	mg/L		-	15/04/24	-	-	-	-	
	pH	pH		-	15/04/24	-	-	-	-	
	Standing Water Level	metres		-	15/04/24	-	-	-	-	
18	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	15/04/24	03/05/24	-	-	-	2000
	Lead	mg/L		1	15/04/24	03/05/24	-	-	-	<0.001
	pH	pH		1	15/04/24	03/05/24	-	-	-	7.84
	Standing Water Level	metres		1	15/04/24	03/05/24	-	-	-	8.18

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date of Max. Value Obtained	Min Value	Mean Value	Median Value	Max or Only Value
19	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	29/04/24	16/05/24	-	-	-	4690
	Lead	mg/L		1	29/04/24	16/05/24	-	-	-	<0.001
	pH	pH		1	29/04/24	16/05/24	-	-	-	6.57
	Standing Water Level	metres		1	29/04/24	16/05/24	-	-	-	16.64

Table 4 – Monthly Attended Noise Monitoring

(Noise Limits Apply - 40dB LAeq(15min) -Day, 37dB LAeq(15min) Evening and Night; 52dB LA1(1min) -Night)

Table 4								
VCM Operational Noise Monitoring Results Leq(15min) – 22 nd & 23 rd April 2024 (Day)								
Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	3:21pm	34	31	45 ¹	3.5 / 124	C	VCM (31) , traffic (31), insects (21)	No
N-AT2 / 8	9:21am	40	IA	40	1.6 / 141	B	Traffic (40), birds (26), VCM (IA)	No
Table 5								
VCM Operational Noise Monitoring Results Leq(15min) – 22 nd April 2024 (Evening)								
Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	7:07pm	36	34	35	2.3 / 121	E	VCM (34) , insects (32)	No
N-AT2 / 8	9:27pm	44	22	37	2.3 / 132	E	Traffic (44), VCM (22) , insects (22)	No
Table 6								
VCM Operational Noise Monitoring Results Leq(15min) – 22 nd & 23 rd April 2024 (Night)								
Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)

N-AT1 / 7	12:10am	35	33	35	2.6 / 125	D	VCM (33) , frogs (29), insects (26)	No
N-AT2 / 8	10:00pm	43	25	37	1.9 / 141	E	Traffic (43), VCM (25) , frogs (20)	No

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 22nd & 23rd April 2024

Location	Time	dB(A), LA _{max}	VCM Contribution dB(A), LA _{max}	Criterion dB(A), LA _{max}	Wind speed (m/s),dir	Stability Class	LA _{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	12:10am	62	38	52	2.6 / 125	D	Insects	No
N-AT2 / 8	10:00pm	57	30	52	1.9 / 141	E	Car	No

Table 5 – Monthly Monitoring (Blasts – Limits Apply)

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non-compliance /breach	Date of Max. Value Obtained
B-01	Blast Noise	dB (Lin Peak)	Every Blast	2	96.5	96.80	133	Nil	26/04/2024
	Blast Vibration	mm/s	Every Blast	2	0.31	0.35	10	Nil	26/04/2024

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non-compliance /breach	Date of Max. Value Obtained
B-02	Blast Noise	dB (Lin Peak)	Every Blast	2	100.85	101.70	N/A	N/A	26/04/2024
	Blast Vibration	mm/s	Every Blast	2	0.70	0.81	80	N/A	26/04/2024

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non-compliance /breach	Date of Max. Value Obtained
B-03	Blast Noise	dB (Lin Peak)	Every Blast	2	91.05	92.40	120	N/A	26/04/2024
	Blast Vibration	mm/s	Every Blast	2	0.16	0.19	10	N/A	26/04/2024

Table 6- Monthly Monitoring (Dust PM10 – Limits apply)

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
PM1 TEOM ($\mu\text{g}/\text{m}^3$)	Continuous	2.8	9.2	18.6
PM2 TEOM ($\mu\text{g}/\text{m}^3$)	Continuous	2.5	10	18.8

Table 7- Monthly Monitoring (Dust PM2.5 – Limits apply)

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
PM1 TEOM ($\mu\text{g}/\text{m}^3$)	Continuous	1.5	3.8	7.6
PM2 TEOM ($\mu\text{g}/\text{m}^3$)	Continuous	0.2	3.8	8

Figure 1 – EPL 21283 Monitoring Locations



EPL Monitoring Locations

● Attened Noise	● TEOM
● Blast Monitor	□ Approved Disturbance Area
● Groundwater	— Mining Lease
● Meteorological	
● Surface Water	



**Vickery Coal Mine
EPL Monitoring Locations**

Date: Sept 2023
MGA Zone 56
Scale: 1:68,000
Author: A. Quiroz

